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Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1 – 15 Cancelled.

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16. (Currently Amended) In a computing apparatus, a method for manipulating a computer design etc. of operation by a computer aided design (CAD) application, the method comprising:  
receiving a user input to perform an operation on a CAD design;  
detecting a failure during performance of the operation;  
generating a failure indication upon encountering a detecting the failure during an operation performed for a user design; and  
automatically facilitating a user providing information to a user to facilitate the user in determining a location of a cause of the failure within the CAD design and information about how to recover from the failure and determining a solution for the failure.

17. (Currently Amended) The method of claim 16, wherein said encountering detecting a failure comprises encountering detecting an occurrence of one or more software events that are to result in at least one of an error and or a warning.

18. (Currently Amended) The method of claim 16, wherein said automatically facilitating providing information comprises generating and displaying a user interface having a title indicative of the operation during which operation, the failure was encountered.

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D/ 19. (Currently Amended) The method of claim 16, wherein ~~said automatically facilitating~~ providing information comprises generating and displaying one or more expandable error messages.

20. (Currently Amended) The method of claim 16, wherein ~~said automatically facilitating~~ providing information comprises generating and displaying one or more error messages in a hierarchical manner.

21. (Currently Amended) The method of claim 16, wherein ~~said automatically facilitating~~ providing information comprises facilitating receiving an indication of at least one of editing, canceling, and accepting the failure.

22. (Currently Amended) The method of claim 16, wherein ~~said automatically facilitating~~ providing information comprises generating and displaying a message having a suggestion for solving the failure.

23. (Currently Amended) The method of claim 16, wherein ~~said automatically facilitating~~ providing information comprises visually indicating a portion of the ~~user~~ CAD design associated with the failure.

24. (Currently Amended) The method of claim 23, wherein ~~said~~ visually indicating comprises highlighting the portion of the ~~user~~ CAD design associated with the failure.

25. (Previously Presented) The method of claim 23, wherein visually indicating comprises generating and displaying a graphical representation of a light bulb.

26. (Currently Amended) An apparatus comprising:

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a storage medium having stored therein a plurality of programming instructions, which when executed, the instructions cause the apparatus to:

receive a user input to perform an operation on a CAD design;

detect a failure during performance of the operation;

generate a failure indication upon encountering a detecting the failure; during an operation performed for a user design, and

automatically facilitate a user provide information to a user to facilitate the user in determining a location of a cause of the failure within the CAD design and information about how to recover from the failure and determining a solution for the failure.

27. (Currently Amended) The apparatus of claim 26, wherein said programming instructions, which when executed, cause the apparatus to ~~encounter~~ detect an occurrence of one or more software events that are to result in at least one of an error ~~and~~ or a warning.

28. (Previously Presented) The apparatus of claim 26, wherein said programming instructions, which when executed, cause the apparatus to generate and display a user interface having a title indicative of the operation during which operation, the failure was encountered.

29. (Previously Presented) The apparatus of claim 26, wherein said programming instructions, which when executed, cause the apparatus to generate and display one or more expandable error messages.

30. (Previously Presented) The apparatus of claim 26, wherein said programming instructions, which when executed, cause the apparatus to generate and display one or more error messages in a hierarchical manner.

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D/ 31. (Currently Amended) The apparatus of claim 26, wherein said programming instructions, which when executed, cause the apparatus to facilitate receiving an indication of at least one of editing, canceling, ~~and~~ or accepting the failure.

32. (Currently Amended) The apparatus of claim 26, wherein said programming instructions, which when executed, cause the apparatus to generate and display a message having a suggestion for solving the failure.

33. (Previously Presented) The apparatus of claim 26, wherein said programming instructions, which when executed, cause the apparatus to visually indicate a portion of the user design associated with the failure.

34. (Previously Presented) The apparatus of claim 33, wherein said programming instructions, which when executed, cause the apparatus to highlight the portion of the user design associated with the failure.

35. (Previously Presented) The apparatus of claim 33, wherein said programming instructions, which when executed, cause the apparatus to generate and display a graphical representation of a light bulb.

36. (Currently Amended ) An article of manufacture having stored therein a plurality of programming instructions, which when executed, the instructions cause a machine to:  
receive a user input to perform an operation on a CAD design;  
detect a failure during performance of the operation;  
generate a failure indication upon ~~encountering a~~ detecting the failure; ~~during an~~  
~~operation performed for a user design;~~ and  
~~automatically facilitate a user~~ provide information to a user to facilitate the user in

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D/ determining a location of a cause of the failure within the CAD design and information about how to recover from the failure ~~and determining a solution for the failure.~~

37. (Currently Amended) The article of manufacture of claim 36, wherein said programming instructions, which when executed, cause the machine to ~~encounter~~detect an occurrence of one or more software events that are to result in at least one of an error and a warning.

38. (Previously Presented) The article of manufacture of claim 36, wherein said programming instructions, which when executed, cause the machine to generate and display a user interface having a title indicative of the operation during which operation, the failure was encountered.

39. (Previously Presented) The article of manufacture of claim 36, wherein said programming instructions, which when executed, cause the machine to generate and display one or more expandable error messages.

40. (Previously Presented) The article of manufacture of claim 36, wherein said programming instructions, which when executed, cause the machine to generate and display one or more error messages in a hierarchical manner.

41. (Currently Amended) The article of manufacture of claim 36, wherein said programming instructions, which when executed, cause the machine to facilitate receiving an indication of at least one of editing, canceling, ~~and/or~~ accepting the failure.

42. (Currently Amended) The article of manufacture of claim 36, wherein said programming instructions, which when executed, cause the machine to generate and display a message having a suggestion for solving the failure.

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D/ 43. (Previously Presented) The article of manufacture of claim 36, wherein said programming instructions, which when executed, cause the machine to visually indicate a portion of the user design associated with the failure.

44. (Previously Presented) The article of manufacture of claim 43, wherein said programming instructions, which when executed, cause the machine to highlight the portion of the user design associated with the failure.

45. (Previously Presented) The article of manufacture of claim 43, wherein said programming instructions, which when executed, cause the machine to generate and display a graphical representation of a light bulb.

46. (New) A method comprising:  
recognizing an occurrence of one or more software events that result in at least one of an error or a warning;  
storing an indication of the error or warning in an error/warning storage structure; and  
returning a result from a function call that indicates that the error/warning indication has been stored in the error/warning storage structure, wherein subsequent function call returns are not required to store error/warning indications resulting from the event causing the stored indication.

47. (New) The method of claim 46, wherein storing an indication of the error or warning includes a thin wrapper class structure.

48. (New) The method of claim 46, further comprising:  
displaying a general message based on one or more error/warning indications stored in the error/warning storage structure.

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49. (New) The method of claim 48, further comprising:  
expanding the general message to provide additional error/warning information in  
response to user input.

50. (New) The method of claim 46, further comprising:  
indicating a design element causing the error or warning.

51. (New) The method of claim 46, wherein the function call is for a first function, the  
method further comprising:  
adding information to the error/warning indication stored in the error/warning storage  
structure, the information reported from a second function that called the first function.

52. (New) A machine-readable medium having stored thereon sequences of instructions,  
which when executed by a processor cause the processor to:  
recognize an occurrence of one or more software events that result in one of an error or a  
warning;  
store an indication of the error or warning in an error/warning storage structure; and  
return a result from a function call that indicates that the error/warning indication has  
been stored in the error/warning storage structure, wherein subsequent function call returns are  
not required to store additional error/warning indications resulting from the event causing the  
stored error/warning indication.

53. (New) The machine-readable medium of claim 52, wherein the sequences of instructions  
that cause the processor to store an indication of the error or warning further comprise a  
sequence of instructions including a thin wrapper class structure constructor.

54. (New) The machine-readable medium of claim 52, further comprising sequences of  
instructions, which when executed by the processor cause the processor to:

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display a general message based on one or more error/warning indications stored in the error/warning storage structure.

55. (New) The machine-readable medium of claim 54, wherein the general message is expanded to provide additional error/warning information in response to user input.

56. (New) The machine-readable medium of claim 52, further comprising sequences of instructions that cause the processor to indicate a design element causing the error or warning.

57. (New) The machine-readable medium of claim 52, wherein the function call is for a first function, further comprising sequences of instructions that cause the processor to:

add information to the error/warning indication stored in the error/warning storage structure, the information reported from a second function that called the first function.

58. (New) An apparatus comprising:

means for recognizing the occurrence of one or more software events that result in one of an error or a warning;

means for storing an indication of the error or warning, in an error/warning storage structure; and

means for returning a result from a function call that indicates that the error/warning indication has been stored in the error/warning storage structure, wherein subsequent function call returns are not required to store additional error/warning indications in the error/warning storage structure.

59. (New) The apparatus of claim 58, wherein the means for storing an indication of the error or warning comprise means for constructing a thin wrapper class structure.

60. (New) The apparatus of claim 58, further comprising means for displaying a general



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message based on one or more error/warning indications stored in the error/warning storage structure.

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61. (New) The apparatus of claim 60, wherein the general message is expanded to provide additional error/warning information in response to user input.

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62. (New) The apparatus of claim 58, further comprising means for indicating a design element causing the error/warning.

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63. (New) The apparatus of claim 58, wherein the function call is for a first function, the apparatus further comprising:

means for adding information to the error/warning indication stored in the error/warning storage structure, the information reported from a second function that called the first function.

64. (New) A method comprising:

detecting at least one of an error or a warning in a first function;

reporting an error/warning message from the first function to an error/warning storage structure;

storing the error/warning message in the error/warning storage structure;

adding information to the error/warning message stored in the error/warning storage structure, the information reported from a second function that called the first function; and

returning a result from a function call for the second function indicating that the error/warning message is stored in the error/warning storage structure.

65. (New) The method of claim 64, wherein the second function calls the first function and the first function returns a result to the second function indicating that the error/warning message is stored in the error/warning storage structure.

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66. (New) A computer program product, tangibly stored on a computer-readable medium, comprising instructions operable to cause a programmable processor to:

detect at least one of an error or a warning in a first function;

report an error/warning message from the first function to an error/warning storage structure;

store the error/warning message in the error/warning storage structure;

add information to the error/warning message stored in the error/warning storage structure, the information reported from a second function that called the first function; and

return a result from a function call for the second function indicating that the error/warning message is stored in the error/warning storage structure.

67. (New) The computer program product of claim 66, wherein the second function calls the first function and the first function returns a result to the second function indicating that the error/warning message is stored in the error/warning storage structure.